UNIVERSITY OF RUSE "ANGEL KANCHEV"

75 years facing knowledge, youth and future

7004 Ruse, 8 Studentska Str.
http://www.uni-ruse.bg

Faculty of Natural Sciences and Education

Courses in English
(face-to-face and online training)

Undergraduate Studies in Computer Science

Winter semester, 2021/2022 academic year			Summer semester, 2021/2022 academic year		
FIRST YEAR					
Code	Course name	ECTS	Code	Course name	ECTS
S01034	Introduction to Programming	8	S01076	Object Oriented Programming	8
S00848	Introduction to Informatics	4	S01083	Computer Architectures	6
S01051	Calculus I	6	S00854	Discrete Structures	6
S01065	Linear Algebra and Geometry	8	S01089	Calculus II	6
S00856	English Part I	4	S01106	English Part II	4
SECOND YEAR					
S01118	Data Structures and Programming	7	S01182	Data Bases	7
S01119	Operating Systems	6	S01183	Computer Networks and Communications	5
S01122	Computer Graphics	7	S00865	Multimedia Systems and Technologies	7
S01125	Numerical Methods	6	S01184	Non-procedural Programming	5
S01181	English for Computing	4	*Elective Courses* *(students elect a course from each group)*		
				Group A	
			S01186	Workshop in Object-oriented programming	3
			S01187	Workshop in Computer Graphics	3
				Group B	

				S01188	Workshop on Discrete Structures	3
				S01190	Mathematical Software	3

THIRD YEAR

S01192	Algorithm Development and Analysis	6		S01212	Artificial Intelligence	6
S01410	Component Oriented Programming	6		S01215	Internet Technologies	6
S01194	Information Systems	6		S01185	Probability and Statistics *	5
S01197	Software Engineering	7				
	Elective Courses (students elect a course)				*Elective Courses (students elect a course from each group)*	
S01200	Mathematical Methods for Optimization	5			**Group A**	
S01248	Operations Research	5		S01198	Workshop in Databases	3
				S01199	Workshop in Data Structures and Programming	3
				S00887	Integrated Practice	3
					Group B	
				S01191	The Number Theory	5
				S01260	Coding Theory	5
					Group C	
				S01444	History of Mathematics and Informatics and IT	5

FOURTH YEAR

S01446	Human-computer Interaction	5		S01518	Computer Modeling	4
SB10019	Image Processing	6				

SB10020	Programming Languages, Automation, Computing	6
Elective Courses *(students elect a course from each group)*		
Group A		
S01475	Programming for Internet	5
S01481	Web Design	5
Group B		
SB10021	Computer Linguistics	5
S01501	Client-Server Technology	5
Group C		
S01218	Workshop on Software Engineering	3
S01245	Workshop on Computer Networks and Communications	3
S01244	Workshop on Non-procedural Programming	3

Elective Courses *(students elect a course from each group)*		
Group A		
SB10022	Social-legal aspects of Information technologies	4
SB10023	Information Technologies in Management	4
Group B		
S01538	Programming of Mobile Devices	4
S01539	Geographical Information Systems	4
S01544	Visual Programming	4
Group C		
S01545	Assembler	4
S01546	System Programming	4

* Individual tuition in English

Undergraduate Studies in Informatics and Information Technologies in the Business

Winter semester, 2021/2022 academic year			Summer semester, 2021/2022 academic year		
FIRST YEAR					
Code	**Course name**	**ECTS**	**Code**	**Course name**	**ECTS**
S00848	Introduction to Informatics	4	S00061	Computer Architectures	6
S00845	Calculus	6	S00854	Discrete Structures	6
S00856	English Part I	4	S01106	English Part II	4
S00832	Linear Algebra and Geometry	6	S01076	Object Oriented Programming	8
SECOND YEAR					
S01119	Operating Systems	6	S00861	Probability and Statistics*	6
S00857	Computer Graphics	7	S00863	Computer Networks and Communications	6
S00859	Accounting	5	S01184	Non-procedural Programming	6
S00860	Human Resource Management	5	S01510	Data Bases	7
S01118	Data Structures and Programming	7			
THIRD YEAR					
S00867	Component Oriented Programming	6	S01215	Internet Technologies	6
S01197	Software Engineering	7	S01212	Artificial Intelligence	6
S00869	Communication Policy	6	S00875	Multimedia Systems and Technologies	5
S00600	Operations Research	6	*Elective Courses* *(students elect a course)*		
			S00882	Workshop in Software Engineering	3
			S00886	Workshop in Computer Graphics	3
			S00887	Workshop	3

	FOURTH YEAR					
S00892	Visual Programming Ms Office	7				
SB10019	Image Processing	6				
S01446	Human-computer Interaction	6				
S01194	Information Systems	6				
Elective Courses *(students elect a course)*			*Elective Courses* *(students elect a course)*			
	Group A			**Group A**		
S01475	Programming for Internet	5	S01544	Visual Programming	4	
S01481	Web Design	5	S01539	Geographical Information Systems	4	
			S01538	Programming of Mobile Devices	4	
			S00908	Computer Linguistics	4	
				Group B		
			S01546	System Programming	4	
			S01545	Assembler	4	
				Group C		
			S00912	Computer Modelling	4	
			SB10025	Programming Languages, Automation, Computing	4	

* Individual tuition in English

Undergraduate Studies in Financial Mathematics

Winter semester, 2021/2022 academic year			Summer semester, 2021/2022 academic year		
FIRST YEAR					
Code	**Course name**	**ECTS**	**Code**	**Course name**	**ECTS**
S00701	Mathematical Analysis, Part I *	6	S00870	Mathematical Analysis II *	7
S00769	Linear Algebra and Geometry *	7	SB15476	Discrete Mathematics *	6
SB13824	English in Financial Mathematics 1	5	S01094	Theory of Probability *	6
			S00771	English in Financial Mathematics 2	5
SECOND YEAR					
S01223	Ordinary Differential Equations*	7	S01548	Partial Differential Equations *	5
S01448	Statistics*	6	S01550	Econometrics *	5
SB13824	English in Financial Mathematics 3	5	SB10203	English in Financial Mathematics 4	4
			SB15445	Programming with Python	5
THIRD YEAR					
S02373	Introduction to Financial Mathematics *	7	S02378	Insurance Mathematics*	7
S00876	Operations Research in Economics*	7	SB15167	Modelling in Finance *	6
Elective Courses (students elect a course)			*Elective Courses (students elect a course)*		
S02375	Typesetting with LaTeX *	5	S02381	Web Design *	5
S02376	Computer Graphics *	5	S02382	Multimedia Systems and Technologies *	5
FOURTH YEAR					
SB14353	Computer Finance*	6			

* Individual tuition in English

Undergraduate Studies in Pedagogy of Education in Mathematics and Informatics

Winter semester, 2021/2022 academic year			Summer semester, 2021/2022 academic year		
FIRST YEAR					
Code	Course name	ECTS	Code	Course name	ECTS
S01027	Linear Algebra	6	S00982	Discrete Mathematics	6
S01034	Introduction to Programming	7	SB15289	Algebra and Number Theory	6
S01051	Mathematical Analysis 1	6	S00870	Mathematical Analysis 2	7
SB15221	Geometry	7	S01076	Object-oriented Programming	7
S01947	English 1	4	S01504	English 2	4
SECOND YEAR					
S02611	Pedagogy	6	S00054	Pedagogical Psychology	5
SB15234	Data Structures and Programming	6	S00055	Data Bases *	6
SB15222	Programming with C-Sharp	5	S00056	Computer Architectures *	5
S01119	Operating Systems	6	SB15223	School Course in Combinatorics, Probability and Statistics	6
S00058	Probability and Statistics *	7	SB15224	School Course in Algebra and Mathematical Analysis	8
THIRD YEAR					
S00057	Computer Graphics and Image Processing *	6	S02042	Methods of Instruction in Mathematics *	6
SB15225	Information and Communication Technologies in Education and Work in Digital Environment *	4	S02043	Methods of Instruction in Informatics and Information Technologies *	6
S01096	School Course in Informatics and	5	S02048	Lesson Observation in Mathematics *	2

	Information Technologies *					
SB15226	School Course in Geometry *	8		S02060	Lesson Observation in Informatics and IT*	2
SB15227	Ordinary and Partial Differential Equations *	5		SB15235	Multimedia Systems and WEB Design *	5
SB14538	Inclusive Education *	2		S02064	Computer Networks andCommunication *	5
				S00048	Mathematical Software	4

FOURTH YEAR

SB15256	Extracurricular Work in Mathematics *	5				
SB15229	Extracurricular Work in Informatics *	5				
Elective Courses *(students elect a course)*				*Elective Courses* *(students elect a course)*		
SB15257	Mathematical Optimization *	5		SB14729	Pedagogical Communication *	3

* Individual tuition in English

Undergraduate Studies in Pre-school and Primary School Education

Winter semester, 2021/2022 academic year				Summer semester, 2021/2022 academic year		
FIRST YEAR						
Code	**Course name**	**ECTS**		**Code**	**Course name**	**ECTS**
SB14535	History of Pedagogy and Bulgarian Education	5		SB14553	Methods of Teaching Elementary Mathematical Concepts	7
SB14536	General Psychology	3		S02022	Pedagogical Communication	1
S02406	Basic Theory of Music	2		SB15598	Information and Communication Technologies in Education and Work in Digital Environment	5
				SB14552	Fundamentals of Visual Literacy	3
				Elective Courses *(students elect a course)*		
				SB15560	Conflict Management	2
SECOND YEAR						
SB14555	Age Psychology	5		S03880	Methods of Instruction in Mathematics at Primary School Level	8
SB15599	Methods of Instruction in Music at Primary School Level	4		SB15603	Foundations of Nature Sciences	2
SB14559	Methods of Teaching Nature Studies at Kindergarten Level	2		SB15601	Methods of Teaching Art at Primary School Level	5
				SB14558	Methods of Physical Culture in the Kindergarten	
THIRD YEAR						
S03887	Methods of Instruction in Man and Society	5		SB14577	Pedagogical Psychology	3
FOURTH YEAR						
				S03859	Comparative Education	3

Undergraduate Studies in Primary School Education with a Foreign Language

Winter semester, 2021/2022 academic year			Summer semester, 2021/2022 academic year		
FIRST YEAR					
Code	**Course name**	**ECTS**	**Code**	**Course name**	**ECTS**
SB14535	History of Pedagogy and Bulgarian Education	5	SB14552	Fundamentals of Visual Literacy	3
SB14536	General Psychology	3	S02022	Pedagogical Communication	1
S02406	Basic Theory of Music	2	SB15557	English Grammar	3
			SB15558	Information and Communication Technologies in Education and Work in Digital Environment	5
Elective Courses *(students elect a course)*			*Elective Courses* *(students elect a course)*		
S02399	English 1	5	SB15560	Conflict Management	3
S02400	German 1	5			
S02401	French 1	5			
			Elective Courses *(students elect a course)*		
			S02407	English 2	8
			S02408	German 2	8
			S02409	French 2	8
SECOND YEAR					
SB14555	Age Psychology	5	S03880	Methods of Instruction in Mathematics at Primary School Level	8
SB15564	Methods of Instruction in Music at Primary School Level	4	S03903	Lesson Observation (English Language Lessons)	2
			SB15572	Methods of Teaching Art	5

	Elective Courses (students elect a course)				Elective Courses (students elect a course)	
			SB11041	English 4	5	
			SB11042	German 4	5	
			SB11043	French 4	5	
	Elective Courses (students elect a course)			Elective Courses (students elect a course)		
S03920	English 3	9	3930	Educative Work of Class Teachers	1	
S03921	German 3	9				
S03922	French 3	9				

THIRD YEAR

S03887	Methods of Instruction in Man and Society	5	3898	Pedagogical Psychology	3
S03932	Methods of Instruction in English	7	SB14645	Linguistic Aspects of Acquisition of English by Young Learners	5
	Elective Courses (students elect a course)			Elective Courses (students elect a course)	
S03935	English 5	2	S03949	English 6	2
S03936	German 5	2	S03950	German 6	2
S03937	French 5	2	S03951	French 6	2
	Elective Courses (students elect a course)				
SB14641	Pedagogy of Communication Skills	1			

FOURTH YEAR

SB11048	Teaching Practice in English Language	2	S03914	Comparative Education	3
SB15201	Information and Communication Technologies in Education and Work in Digital Environment	2			
SB11050	Children's Literature in English	3			

	Elective Courses (students elect a course)					
SB11053	English 7	3				
SB11054	German 7	3				
SB11055	French 7	3				

Undergraduate Studies in Social Pedagogy

Winter semester, 2021/2022 academic year				Summer semester, 2021/2022 academic year		
FIRST YEAR						
Code	Course name	ECTS		Code	Course name	ECTS
				SB14591	Pedagogical Communication	1
				SB14592	History of Social Pedagogy	5
				SB15598	Information and Communication Technologies in Education and Work in Digital Environment	5
				Elective courses (students elect a course)		
				S01195	Conflict Management	3
SECOND YEAR						
S03867	Age Psychology	5		SB14596	Social-Pedagogical Diagnostics	6
S01207	Family Pedagogy	5		SB14597	Special Pedagogy and Special Psychology	5
				Elective courses (students elect a course)		
				SB14601	Integration of Individuals with Special Educational Needs	2
				SB14602	Methodology of the Work of Counsellors in Schools	2
THIRD YEAR						
S01234	Andragogy	7		SB14609	Pedagogical Psychology	4
S01235	Social-Pedagogical Work with Children and Adolescents in Risk	3				
S01254	Career and Professional Development	4				
				Elective courses (students elect a course)		
				S01312	Stress and Psychological Health	3